



11. ECOSYSTEM MANAGEMENT

“Sustaining our Nation’s military training and testing lands through ecosystem management is among the most important DOD environmental goals”⁸

Fort Wainwright’s natural resources program has traditionally been based on multiple-use management philosophies. However, military training has always been and will continue to be the primary land use. This philosophy will continue through 1998-2002 with one important addition. Maintaining functional ecosystems is now the goal of Fort Wainwright land and natural resources management programs. “Realistic training lands” are often quoted as essential needs by military trainers. This translates into functional ecosystems that can be sustained indefinitely.

Ecosystems that lose their functionality become degraded, and loss of realism for training follows. This is contrary to the commitment to sustain military

training lands (or no net loss in the capability of training lands to support the military mission, as required by the Sikes Act). Thus, the future of Fort Wainwright and its military mission, as well as the community that depends upon the installation, relies on maintaining functional ecosystems.

USARAK will conduct ecosystem management by using the principles of landscape ecology. Multiple-use will occur across the landscape, but not every use may occur at every location. Adaptive management will be used to assess and evaluate results of management actions and will recycle the information back into decision-making for further actions.

⁸Sherri W. Goodman, Deputy Under Secretary of Defense (Environmental Security)

USARAK will manage for biodiversity on Fort Wainwright by maintaining total numbers of species, managing for varied habitats, and maintaining and restoring natural processes to the landscape. Although ecosystem management is not mandated by law, its basic concepts have strong legal implications especially as it relates to the Endangered Species Act, Sikes Act, the Clean Water Act, and NEPA. Ecosystem management is a philosophy that will help protect biodiversity and maintain fully functional ecosystems.

DOD has endorsed ecosystem management, stating its goal is, *“To ensure that military lands support present and future training and testing requirements while preserving, improving, and enhancing ecosystem integrity. Over the long term, that approach shall maintain and improve the sustainability and biological diversity of terrestrial and aquatic (including marine) ecosystems while supporting sustainable economies, human use, and the environment required for realistic military training operations.”*⁹

Principles and guidelines for achieving this goal are listed below:

- ▶ Develop a vision of ecosystem health
- ▶ Develop priorities and reconcile conflicts
- ▶ Maintain and improve the sustainability and native diversity of ecosystems
- ▶ Administer with consideration of ecological units and time frames
- ▶ Support sustainable human activities
- ▶ Develop coordinated approaches to work toward ecosystem health
- ▶ Rely on the best science and data available
- ▶ Use benchmarks to monitor and evaluate outcomes
- ▶ Use adaptive management
- ▶ Implement through installation plans and programs

USARAK will use ecosystem management concepts to guide its natural resources programs on Fort Wainwright during the next five years and beyond. This management philosophy enables the installation to conduct military training while protecting natural resources upon which the quality of training ultimately depends. Concurrently, ecosystem management helps ensure compliance with environmental laws and production of renewable natural resources products.

Biodiversity conservation is an international commitment, and ecosystem management is a recognized means to achieve this commitment. There is debate over specific tactics needed to accomplish this, however, there are broad concepts that appear to be well accepted. This INRMP encompasses these broad concepts as stated in the below sections.

This chapter has a variety of purposes including:

- ▶ Describe biodiversity and ecosystem management and its implementation by the Department of the Army through this INRMP
- ▶ Describe land management units and how they relate to ecosystem management
- ▶ Describe how USARAK will conduct ecosystem management at Fort Wainwright through ecological management units

11-1 Biodiversity Conservation

Biological diversity (biodiversity) refers to the variety and variability among living organisms and the environment in which they occur. Biodiversity has meaning at various levels including ecosystem diversity, species diversity, and genetic diversity (The Keystone Center, 1996).

DOD is developing a policy for biodiversity management that will use the INRMP process as the implementation tool. A first step in this process was the preparation of *A Department of Defense (DOD) Biodiversity Management Strategy* (The Keystone Center, 1996). This report identifies five reasons to conserve biodiversity on military lands:

⁹Department of Defense Instruction Number 4715.3, *Environmental Conservation Program*, May 3, 1996, specifically Enclosure 6.

- (1) Sustain natural landscapes required for the training and testing necessary to maintain military readiness
- (2) Provide the greatest return on DOD's investment to preserve and protect the environment
- (3) Expedite the compliance process and help avoid conflicts
- (4) Engender public support for the military mission
- (5) Improve the quality of life for military personnel

The Keystone Center report (1996) notes that the challenge is “*to manage for biodiversity in a way that supports the military mission*”. This strategy identifies the INRMP as the primary vehicle to implement biodiversity protection on military installations. The model process developed within the strategy includes the following principles:

- ▶ Support the military mission
- ▶ Use joint planning between natural resources managers and military operations personnel
- ▶ Integrate biodiversity conservation into INRMP, ITAM, and other planning protocols
- ▶ Involve internal and external stakeholders up front
- ▶ Emphasize the regional (ecosystem) context
- ▶ Use adaptive management
- ▶ Involve scientists and use the best science available
- ▶ Concentrate on results

This INRMP uses biological conservation approaches in a variety of ways: monitoring and inventory which are critical to adaptive management (Sections 12-2 and 12-3); protection for sensitive areas especially for rare species and communities (Section 13-4); forest management to conserve species richness (Section 14-2); use of native species and reduced landscaping (Section 14-6); and wetland management (Section 14-4).

11-2 Land Management Units

11-2a Impact Areas

Chapter 5 in USARAK Range Regulation 350-2 describes impact areas. Fort Wainwright has three major impact areas: Blair Lakes Bombing Range and Alpha Impact Area on TFTA, and Stuart Creek Impact Area on YTA. Together, they comprise 65,964 acres (Figure 3-2a). Limitations on use of these impact areas are discussed in Section 3-2a(3). In addition, there are temporary impact areas associated with small arms ranges.

11-2b Training Areas

Fort Wainwright has 21 major training areas. There are 13 training areas in the close-in training complex, and seven training areas on YTA. The TFTA is considered a single, large training area (Figure 2-1 and Figure 3-2a).

11-2c Cantonment Area

Fort Wainwright's cantonment area (Figure 2-1) is defined (for purposes of this INRMP) as lands developed with buildings and facilities and their associated natural lands. This category, which comprises 2,430 acres on Fort Wainwright, is all land not included in training or impact areas (Johnston, 1988). Some grounds are intensively maintained, but many areas are unimproved and may provide excellent wildlife habitat. The cantonment area includes Wainwright Army Airfield.

11-2d Fire Management Areas

The Alaska Interagency Fire Management Plan was developed by an interagency planning team under a provision of the Alaska National Interest Lands Conservation Act (ANILCA, Section 1201j). It provides an opportunity for land managers within the planning area to accomplish their land use objectives through cooperative fire management. The area covered by the plan includes Fort Wainwright. However, when the plan was prepared, there were no representatives from DOD in the planning group, so many Defense lands were unplanned. In recent years, Fort Wainwright and Fort Greely have been added to this planning effort.

The Fire Management Plan established four categories: Critical Protection, Full Protection, Modified Action, and Limited Action. Below are summaries of each category (Anonymous, 1982):

Critical Protection. Areas receive maximum detection coverage and are highest priorities for attack response. Immediate and aggressive initial attack is provided. Land owners/managers are notified of the situation as soon as possible. Critical protection areas receive priority over adjacent lands and resources in the event of escaped fires.

Full Protection. Areas receive maximum detection coverage and receive immediate and aggressive initial attack responses. If the initial attack response is successful or the fire is otherwise controlled within the first burning period, special agency notification is not required. When fires escape initial attack and require additional suppression, affected land owners/managers are notified to develop further fire strategy.

Modified Action. This option provides a level of protection between Full and Limited. The intent is to provide a relatively high degree of protection during periods of increased fire danger but a lower level of protection when risk of fires is diminished. Modified protection areas receive maximum detection coverage. Initial attack action, or non-action, is based on the potential for resource damage, constraints on the affected land (dudded impact areas, for example), and/or discussions with the land owner/manager. If initial attack is not used, the land owner/manager is apprised of the situation daily. Unmanned fires are monitored.

Limited Action. This option recognizes areas where natural fire is important or the values at risk do not warrant the expense of suppression. Limited protection areas receive routine detection effort. Attack response is based on needs to keep the fire within Limited protection areas and to protect individual Critical protection sites within Limited protection areas. Land owners/managers are immediately notified of fires detected. Unmanned fires are monitored.

There are two other special categories on Army lands in Alaska. *Unplanned* areas are those with no offi-

cial designation but are treated as Full Protection areas until such time as they are officially designated. *Restricted* is a category used for impact areas and other places where no “on-the-ground” fire fighting occurs. Fires can still be suppressed in *Restricted* areas, but suppression is through backburning or aerially-dropped retardant.

YTA is divided into three fire management areas and a number of Critical fire suppression sites. Stuart Creek Impact Area and almost all of its buffer area, as well as land to the northeast, is in a Limited fire protection area. An area to the northwest and another area to the south of the impact area are designated as Modified fire protection areas. The remainder of YTA (to the east of the impact area) has Full fire protection. The BLM will work with the Army to develop a Wildland Fire Protection Plan to reduce the fire hazard on YTA.

TFTA now has *Limited* fire protection, which is an upgrade from the previously Unplanned designation. The Main Post is not included within the AFS fire protection system (*Unplanned*). However, upon request from Fort Wainwright, AFS will provide fire suppression assistance to the Fort Wainwright Fire Department. Figure 11-2d shows fire management designations on Fort Wainwright.

11-2e Game and Fisheries Management Units

Fort Wainwright is within the Fairbanks Fisheries Management Unit and Game Management Unit 20 administered by the ADF&G. TFTA is part of Game Management Subunit 20A, and YTA and the Main Post are part of Subunit 20B. These designations are used for regulating hunting, fishing, and trapping by ADF&G. ADF&G-imposed fishing regulations for Fort Wainwright are within the ADF&G Tanana River Drainage regulations.

11-2f Ecological Management Units

Ecological management units on Fort Wainwright have been created to integrate ecosystem management with military and other land uses. Ecological management units are based on the ecological land classification for Fort Wainwright (Sections 8-1b and 12-2d(1)). Ecological management sub-units follow

closely with training area boundaries to allow more effective management, since the primary land use, military training, schedules use by training areas. The Main Post is managed as one ecological unit, YTA is managed as one ecological management unit with nine sub-units, and Tanana Flats Training Area is managed as one ecological management unit with four sub-units (Figure 11-2f).

11-3 Fort Wainwright as Part of a Regional Ecosystem Management Effort

11-3a Regional Bird Partnerships

The USFWS plans to conduct a habitat assessment of wetlands in the Fairbanks area, primarily to categorize bird usage of different wetland classifications. The Waterways Experiment Station wetland delineation (Section 12-2b) on Fort Wainwright may be useful to this project. No additional wetland inventories are planned for the next five years.

The Alaska Bird Observatory conducted bird surveys, via the USFWS, of a proposed YTA-TFTA connecting route and in the cantonment area. A USARAK biologist is part of a Partners in Flight working group that is developing a list of species of concern for interior Alaska. This effort will continue during the next five years.

11-3b Regional Habitat Restoration Goals

ADF&G uses prescribed burning for habitat restoration (reducing the amount of black spruce) on state lands west of Wood River. This burning is facilitated through the *Western Tanana Flats Prescribed Burning Plan* (State of Alaska, 1995). This plan has three goals and three objectives. USARAK has adopted these goals for habitat restoration on Fort Wainwright:

Goals:

- ▶ Restore age diversity among aging vegetative types, thereby maintaining or enhancing wildlife habitat values for species needing early to mid-successional stages

- ▶ Maintain or enhance wildlife use opportunities in an area close to human population centers in the Interior
- ▶ Reduce the risk of unmanageable, expensive, and potentially dangerous wildland fires that could threaten adjacent communities and protected timber resources

Objectives:

- ▶ Burn 50%-70% of the three core area
- ▶ Kill at least 50% of the existing black spruce occurring in the final burned area with a burn of varying intensities to allow the shrub understory component to proliferate by sprouting
- ▶ Kill at least 50% of existing above-ground stems of birch, aspen, poplar, and willow to promote root or basal sprouting

This plan includes discussions of preburn considerations, public notice of planned burns, burning prescriptions, ignition methods, smoke management considerations, holding plan, contingency plan for fire escape, communications and coordination, and monitoring and evaluation. This plan could be used as the basis for a Fort Wainwright prescribed burning plan.

11-3c Fortymile Caribou Herd Regional Management

Sections 12-3a(9) and 14-3b(3) describe USARAK's commitment to restoration of the Fortymile caribou herd. Proposals presented in the plan to achieve herd recovery include maintaining habitat quality, limiting effects of harvest on the herd, decreasing predation, monitoring plan effectiveness, increasing public awareness of the herd, and providing future planning processes. USARAK will provide support for this plan during 1998-2002, consistent with available resources and recognizing that the installation is only on the fringe of the herd's range.

11-4 Ecosystem Management on Fort Wainwright

Ecosystem management on Fort Wainwright will be accomplished on a landscape scale using the prin-

ciples of landscape ecology. Multiple-use concepts will be applied across the landscape. While all land uses will be considered across the landscape, not every use may be compatible on each acre. GIS will be used to identify compatible land uses. USARAK can implement ecosystem management. Each ecological management unit will have a management prescription that will define compatible uses, prioritize uses, access and delineate ecosystem management objectives. Prioritizing land uses for each management unit guides conflict resolution. Ecological management units on Fort Wainwright are shown in Figure 11-2f.

Ecological management units roughly use boundaries of ecodistricts cited in the ecological land classification for Fort Wainwright (ABR, 1997) (see Sections 8-1b and 12-2d(1)). Ecological management sub-units generally use training area boundaries because training area boundaries determine use and access in many cases.

Each ecological management unit will be managed under one or more management levels. Each management level is described below:

Intensive Management. Intensive management areas are sub-units that are highly populated, receive high levels of use, and are easily accessible by road. All forms of surveys, monitoring, and active management of land, forest, fish and wildlife, and recreation resources may be conducted, including such intensive urban area management as urban pest control and improved grounds maintenance.

Full Management. Full management areas are sub-units that receive use and are accessible by road. All forms of surveys, monitoring, and active management of land, forest, fish and wildlife, and recreation resources may be conducted with exception of intensive urban area management options.

Modified Management. Modified management areas are sub-units that receive use, are not accessible by road, but are open to public access. All forms of surveys, monitoring, and active management of land, forest, fish and wildlife, and recreation resources may be conducted, but may not be practical.

Limited Management. Limited management areas are sub-units where public access is prohibited. Methods of ecosystem management will concentrate

on remote monitoring and passive means of conducting management.

Below sections discuss each ecological management unit in terms of description and management objectives. Following each ecological management unit are descriptions of ecological sub-units in terms of location, description, public access policies, compatible uses, management priorities (further described in Chapters 12-17), and summaries of management prescriptions (further described in Chapters 12-17).

11-4a Main Post Ecological Management Unit

Description. The Main Post ecological management unit is composed of two primary land use types. Urban areas include the cantonment area, landfill, Wainwright Army Airfield, and recreation areas, such as the ski hill.

Training areas are the other primary use type. There are 12 Local Training Areas (LTA). The Main Post area lies primarily in the Tanana River Floodplain ecodistrict. There are two ecosubdistricts of the Tanana Floodplain ecodistrict that make up Main Post.

The Chena Floodplain ecosubdistrict is a meandering stretch of the lower Chena River that includes riverbed deposits and active and inactive-floodplain cover deposits linked by surface and groundwater movement. The lower perennial river has clear water. Permafrost is absent. Vegetation includes partially vegetated river barrens, riverine willow and alder tall scrub, balsam poplar and white spruce forests, and wet sedge meadows. Forest productivity is high.

The Fairbanks Lowlands ecosubdistrict is a flat area adjacent to the Tanana River that is dominated by abandoned floodplain cover deposits and occasional organic bogs. Permafrost is nearly continuous; it is absent in occasional collapse-scar bogs which are the result of permafrost degradation. Common vegetation includes black spruce, tamarack, birch forests and shrub birch-ericaceous shrub.

The third portion of the Main Post ecological management unit is the Little Chena Uplands, also

known on Fort Wainwright as Birch Hill. The Little Chena Uplands are part of the Steese-White Mountain ecodistrict. These well-drained, upland areas have a loess cap over weathered bedrock. Permafrost is present on northern and lower slopes and absent on southern slopes. In permafrost free areas, groundwater is found only at great depths, whereas in permafrost areas, soils may be saturated for portions of the growing season. White spruce-birch-aspen forests on southern slopes, black spruce forests on northern slopes, and riverine willows in small drainages are common.

Ecosystem Management Objective.

- ▶ Manage the Main Post ecological management unit as an Intensive Management area.

11-4a(1) Urban Areas Sub-unit

Location. The Urban Areas sub-unit borders the eastern boundary of Fairbanks.

Description. The Urban Areas sub-unit contains all buildings, facilities, and improvements that make up the Main Post of Fort Wainwright. The Urban Areas sub-unit is comprised of both the Fairbanks Lowlands ecosubdistrict and the Chena Floodplain ecosubdistrict.

Public Access. Fort Wainwright is an open post to the public. Only for reasons of safety, security, or interference with the military mission may areas be restricted from public use.

Compatible Uses. The Urban Areas sub-unit can support small unit training, classroom training, individual training, non-fire range facilities, housing, and office facilities. Other compatible uses include improved grounds management, natural resources management, fishing, bird watching, hiking, skiing, camping, and new construction. Activities that are not compatible in the Main Post Urban Area are live-fire military training and ORV use.

Management Priorities.

1. Support the military mission.
2. Manage improved grounds.
3. Conduct pest management.
4. Participate in the Green Star program.

5. Implement the Watchable Wildlife program.
6. Prevent and suppress undesirable wildfires.
7. Conduct BASH.
8. Enforce hunting, trapping, and fishing laws and regulations.
9. Conduct water quality surveys.
10. Monitor fish and wildlife.

Management Prescription. USARAK will conduct neotropical migratory bird monitoring, groundwater monitoring, and a baseline water quality survey in the Urban Areas sub-unit. The Urban Areas sub-unit receives Critical fire protection. Habitat management in urban areas will use duck and owl habitat nesting boxes and manage vegetation on rights-of-way. Urban area ponds will be enhanced under the adopt-a-fishing-hole program and stocked with fish; a kids' fishing derby will be held. The BASH program will minimize the risk of bird airstrikes around the runway.

Erosion control along the Chena River will be assessed and controlled when necessary. USARAK will conduct improved grounds management by maintaining the urban forest and landscaping. The number of acres of maintained grass will be reduced by implementing the no-mow program, which will also improve urban habitat for wildlife species. Integrated pest management will control noxious plant and animal species. Through these efforts, Fort Wainwright will continue in the Green Star program. USARAK has enhanced watchable wildlife opportunities in the cantonment area by constructing two wildlife viewing platforms along the Chena River and will develop a nature trail. USARAK will conduct soldier education as part of the EA program, natural resources and cultural resources awareness for the military community and the public, youth education, and hunting, fishing, and trapping awareness. USARAK will create a wildlife display area to further enhance educational opportunities.

11-4a(2) Local Training Areas Sub-unit

Location. The Local Training Area (LTA) sub-unit borders and intermixes with the Urban Areas sub-unit.

Description. LTA 101 is 229 acres and consists of variably wooded and open terrain, mostly level, with some wet areas. LTA 102 is 184 acres and is a level, wooded site with numerous trails. LTA 104 is 435 acres and is a mostly level site with some wet areas and numerous trails. LTA 106 is 168 acres and is wooded with some openings, numerous trails, and recreational areas. LTA 107 is 160 acres and contains 65.59 acres of wetlands. LTA 108 is 235 acres and is mostly wooded with some openings, has numerous trails, and is bordered by the Chena River on the south. LTA 109 is 37 acres and is a very wet area with numerous trails. LTA 110 is 200 acres and consists of mixed woods with wet areas and numerous trails. LTA 111 is 200 acres and consists of mixed woods with wet areas and numerous trails. LTA 112 is 131 acres and consists of mixed woods, open areas, and wet areas. LTA 113 is 615 acres and consists of low, very wet marsh with some trails. LTA 114 is 738 acres and consists of highly variable terrain and slopes with gravel pits and facilities. The Local Training Areas sub-unit is comprised of both the Little Chena Uplands ecosubdistrict and the Fairbanks Lowlands ecosubdistrict.

Public Access. Secondary access to the Birch Hill Biathlon Range and Public Ski Trail is from Birch Hill Road (primary access is from the Steese Highway). Wildlife improvement areas are open to training activities.

Compatible Uses. Main Post Local Training Areas are capable of supporting small unit training year-round except for wetlands and other lowlands where military activities involving vehicles is limited to winter. LTA 102 is used for small unit summer and winter bivouacs and unit qualifications. LTA 104 is heavily used for summer and winter bivouacs and foot training. LTA 104 contains the Urban Assault Course (Splinter Village), Obstacle Course, and Rappel Tower. LTA 106 is used for cold weather survival training, foot training, and bivouacking. LTA 106 contains the ALIT winter survival training site. LTA 107 is used for foot training in summer. LTA 108 is used for bivouacking and foot training in summer. LTAs 101, 109, 110, 111, 112, 113 and 114 support small unit training. The NBC Complex is located in LTA 114. There are no areas off-limits to training in LTA 102, 104, 106, 107, 108, 109, 110, 111, 112, 113, 114, and 101.

Other compatible uses include natural resources management, habitat improvement, firewood and Christmas tree sales, fishing, trapping, birdwatching, hiking, skiing, camping, and ORVs in specific areas. Activities that are not compatible within the Local Training Areas sub-unit include live-fire training exercises, digging in wetlands without a permit from the Corps of Engineers, and new building construction. The tank removal revegetation area is still closed to mechanized civilian and military vehicles.

Management Priorities.

1. Support the military mission.
2. Conduct LCTA monitoring.
2. Monitor military impacts.
3. Monitor recreational impacts.
4. Inventory the forest ecosystem.
5. Prevent and suppress undesirable wildfires.
6. Manage special interest areas.
7. Manage the forest ecosystem.
8. Manage wildlife habitat.
9. Control erosion.
10. Conduct LRAM projects.
11. Implement the Watchable Wildlife program.
12. Enforce hunting, trapping, and fishing laws and regulations.
13. Manage recreational use and impacts.
14. Conduct Section 404 consultation.
15. Survey forest fuels.
16. Survey neotropical migratory birds.
17. Survey small mammals.
18. Conduct baseline water quality survey.
19. Monitor fish and wildlife.
20. Manage wildlife populations.

Management Prescription. USARAK will conduct a forest ecosystem inventory, forest fuels survey, neotropical migratory bird surveys, a baseline water quality survey, and small mammals surveys. USARAK will monitor moose, bears, small game, neotropical migratory birds, and furbearers. USARAK will conduct LCTA monitoring and moni-

tor military impacts, recreational impacts, and groundwater.

The Sage Hill area will be managed as a special interest area, protected because of its relic steppe vegetation. Birch Hill will be utilized for firewood and Christmas tree sales, and timber will be available for use by training units. Habitat management for ruffed grouse will be conducted, and vegetation will be managed along rights-of-way for habitat. Fish stocking will occur in lakes. Erosion along the Chena River will be controlled. LTAs 101, 102, 104, 105, 106, 107, and 108 will be cleaned and repaired as part of the LRAM program. Noxious plant and animal control will be conducted where necessary. Watchable Wildlife projects will be implemented in the LTA sub-unit. Natural and cultural resources awareness, and hunting, trapping, and fishing awareness programs will educate soldiers, installation staff, and the public. ORVs will be limited to designated areas. Hunting, fishing, and trapping regulations will be enforced.

11-4b Yukon Training Area Ecological Management Unit

Description. The YTA ecological management unit is contained within the Steese-White Mountains ecodistrict, within the Interior Highlands ecoregion. The YTA unit is comprised almost entirely of the Chena-Salcha Highlands ecosubdistrict. The Chena-Salcha Highlands is a mountainous area of weathered bedrock in the alpine areas, residual soils on upper slopes, upland loess near the Tanana River, upland retransported deposits, lowland retransported deposits on lower slopes, and headwater streams. The areas are hydrologically linked by surface and groundwater flow. Permafrost is present on northern and lower slopes and absent on southern slopes. White spruce-birch-aspen forests are found on southern slopes, black spruce forests are found on northern slopes, riverine willows are found in drainages, and alpine tundra are commonly located on high exposed ridges.

The YTA unit is also made up of small regions of Stuart Creek Lowlands and French-Moose Creek Lowlands sub-ecodistricts.

Ecosystem Management Objectives.

- ▶ Manage sub-units 1, 2, and 4 as Full Management areas
- ▶ Manage sub-units 3, 5, 6, 7 as Modified Management areas
- ▶ Manage sub-units 8 (Stuart Creek Impact Area) and 9 (AFTAC) as Limited Management areas

Public Access. The YTA Unit is land withdrawn from public use for military use. The public has access to the area for recreational and subsistence purposes. Access to the area can be restricted when non-participants may be endangered by military activities. Once the public has been notified by the local news media, selected main roads leading to the area requested for the exercise will be closed. Temporary road barricades (saw horses, concertina wire, etc.) supplied by the using unit will be emplaced at appropriate points along the road network to warn approaching non-participants. Road barriers will be manned by participating units with knowledge of dates and times of the road closure. Once training plans have been finalized, presented to Range Control, and notice given to the public, changes are not accepted. Areas not authorized for public use include impact areas, rappelling towers, small arms ranges, and areas published in the weekly bulletin as being a danger area, restricted area, or off-limits. Permanently closed areas are Stuart Creek Impact Area, AFTAC, Charley and Bravo Battery Sites, and the Manchu Firing Range.

11-4b(1) YTA Sub-unit 1

Location. YTA sub-unit 1 is located in the northwestern portion of YTA, northeast of Eielson Air Force Base in the Chena River flood plain. YTA sub-unit 1 has the same boundaries as Yukon Training Area 1.

Description. YTA sub-unit 1 is 11,735 acres and has primarily level terrain (< 1%) with 9,049 acres of wetland and numerous small lakes. This area's primary features are Husky Drop Zone and the old MOUT site. The old MOUT site is at the end of Transmitter Road and is controlled by the Air Force. Two trails access Husky DZ via Transmitter Road.

Public Access. Public access is allowed for recreation, subject to safety restrictions and military security when access does not impair the military mission, as determined by the installation commander.

Compatible Uses. YTA sub-unit 1 is suitable for small arms, platoon to brigade-sized exercises, company-sized live-fire exercises, road marches, and bivouacs. YTA sub-unit 1 is primarily used for large scale training exercises, airborne drops, and winter bivouacs. The recommended time for military activities involving mechanized vehicles is between freeze-up and spring break-up. Husky DZ will sustain year-round use. Air-mobile and air-drop operations may be conducted in this area. There are no areas off-limits to training in YTA sub-unit 1. Permission must be obtained from the Air Force to use the old MOUT site at the northern end of Transmitter Road.

Other compatible uses include natural resources management, habitat improvement, firewood sales, hunting, fishing, trapping, birdwatching, hiking, skiing, dog sledding, and ORV use. Activities that are not compatible with the YTA sub-Unit 1 include airboats, digging in wetlands without a permit, and any permanent, non-military structures, easements, or leases.

Ecosystem Management Priorities.

1. Conduct Section 404 consultation.
2. Conduct LCTA monitoring.
3. Survey neotropical migratory birds.
4. Complete threatened and endangered species surveys.
5. Prevent and suppress undesirable wildfires.
6. Survey for nesting raptors.
7. Survey small mammals.
8. Conduct archaeological survey.
9. Conduct soil survey.
10. Monitor military impacts.
11. Implement LRAM projects.
12. Enforce hunting, trapping, and fishing laws and regulations.
13. Monitor recreational impacts.
14. Manage wildlife habitat.

15. Manage recreational use and impacts.
16. Monitor fish and wildlife.
17. Inventory the forest ecosystem.
18. Manage wildlife populations.
19. Control erosion.
20. Implement the Watchable Wildlife program.

Management Prescription. USARAK will conduct or complete a planning-level soil survey, a forest ecosystem inventory, forest fuels survey, threatened and endangered species survey, nesting raptor surveys, neotropical migratory bird surveys, small mammal surveys, baseline water quality surveys, and archaeological surveys on YTA sub-unit 1. USARAK will monitor moose, bears, small game, neotropical migratory birds, waterfowl, furbearers, wolves, and the Fortymile caribou herd if the herd comes onto Fort Wainwright in significant numbers. USARAK will also conduct LCTA monitoring and monitor military exercise impacts and recreational impacts.

The fire management protection level is Full fire suppression. Forest ecosystem management will include timber removal for military support, and timber products for units. Habitat management will include moose habitat improvement, fish habitat improvement, and vegetation management to improve habitat on rights-of-way. Hunting, trapping, and fishing harvest management will occur.

USARAK will conduct Section 404 consultation with the Corps of Engineers to obtain permits for military exercises in YTA sub-unit 1. In support of the permit, USARAK will manage wetlands. USARAK will control erosion along the Chena River and other locations in YTA sub-unit 1. USARAK will also implement an LRAM project to improve access to Husky Drop Zone.

USARAK will conduct natural and cultural resources awareness, and hunting, trapping and fishing awareness programs. USARAK will evaluate the potential to construct watchable wildlife viewing platforms and enhance fishing opportunities on Horseshoe Lake. USARAK will conduct hunting, trapping, and fishing enforcement as well as trespass enforcement in YTA sub-unit 1. USARAK will manage recreation use and impacts by managing hunting, trapping and fishing.

11-4b(2) YTA Sub-unit 2

Location. YTA sub-unit 2 is located in the southwestern portion of the YTA, directly east of Eielson Air Force Base. YTA sub-unit 2 has the same boundaries as Yukon Training Area 2.

Description. YTA sub-unit 2 is 38,496 acres. Two-thirds of the sub-unit has steep (>35%) slopes, leading to low, wet, flat areas around Manchu Lake and French Creek. There are 15,562 acres of wetlands in YTA sub-unit 2. This area consists of numerous wildlife habitat improvement areas which may be used for training. Facilities include Winter Camp, Manchu Range, Engineer Training Camp, French Creek Small Arms Impact Area, and the Biathlon Course.

Public Access. Public access is allowed for recreation, subject to safety restrictions and military security when access does not impair the military mission, as determined by the installation commander. Access to Manchu Range and the French Creek Small Arms Impact Area is prohibited.

Compatible Uses. YTA sub-unit 2 is suitable for small arms, platoon to brigade-sized exercises, company-sized live fire exercises, road marches, and bivouacs. The training area is used for large scale exercises, year-round bivouac, land navigation, maneuver using SUSVs, and live fire on Manchu Range, including mortars and mines. The recommended time for military activities involving mechanized vehicles in valley areas is between freeze-up and spring break-up. Other military activities can be conducted year-round. There are no areas off-limits to training in YTA sub-unit 2.

Other compatible uses include natural resources management, habitat improvement, hunting, fishing, trapping, birdwatching, hiking, skiing, dog sledding, and ORV use. Activities that are not compatible with the YTA sub-unit 2 include digging in wetlands without a permit from the Corps of Engineers and any permanent, non-military structures, easements, or leases.

Ecosystem Management Priorities.

1. Conduct Section 404 consultation.
2. Conduct LCTA monitoring.

3. Complete survey for threatened and endangered species.
4. Prevent and suppress undesirable wildfires.
5. Survey for nesting raptors.
6. Survey neotropical migratory birds.
7. Survey small mammals.
8. Conduct archaeological survey.
9. Implement LRAM projects.
10. Monitor military impacts.
11. Manage wildlife habitat.
12. Conduct prescribed burning.
13. Conduct soil survey.
14. Monitor fish and wildlife.
15. Enforce hunting, trapping, and fishing laws and regulations.
16. Control erosion.
17. Monitor recreational impacts.
18. Inventory the forest ecosystem.
19. Manage the forest ecosystem.
20. Manage wildlife populations.
21. Survey forest fuels.
22. Conduct hunting, trapping, and fishing awareness programs.
23. Implement the Watchable Wildlife program.
24. Enforce trespass abatement.
25. Manage recreational use and impacts.

Management Prescription. USARAK will conduct or complete planning-level soil surveys, forest ecosystem inventory, forest fuels survey, threatened and endangered species surveys, nesting raptor surveys, neotropical migratory bird surveys, small mammal surveys, a baseline water quality survey, and archaeological surveys. USARAK will monitor moose, bears, small mammals, neotropical migratory birds, furbearers, wolves, and the Fortymile caribou herd if the herd comes onto Fort Wainwright in significant numbers. USARAK will conduct LCTA monitoring and monitor groundwater and impacts from recreation.

The fire protection level will be Full suppression in YTA sub-unit 2. USARAK will conduct prescribed

burning on Manchu Range and in grouse habitat areas. Forest ecosystem management will include timber removal for military mission support, timber stand improvement, forest regeneration, timber management, forest disease protection, and timber products for military training. Habitat management will include moose and ruffed grouse habitat improvement, fish habitat improvement, and vegetation management for wildlife habitat improvement on rights-of-way. USARAK will also participate in hunting, trapping, and fishing harvest management, a black bear sustainable harvest study, and fish stocking.

USARAK will conduct Section 404 consultation to obtain permits for Arctic Strike and Northern Edge exercises and a five-year general permit to allow training in wetlands. As mitigation for those permits, USARAK will manage wetlands and will repair wetland damage when necessary. USARAK will conduct erosion control along Manchu Lake and will harden the bivouac site at Wintercamp next to Manchu Range.

USARAK will conduct natural and cultural resource education and awareness, and hunting, trapping, and fishing awareness programs. USARAK will conduct trespass enforcement and hunting, fishing and trapping enforcement in YTA sub-unit 2. USARAK will also manage recreational use impacts by developing ORV policy; managing hunting, trapping and fishing; and enhancing fishing opportunities.

11-4b(3) YTA Sub-unit 3

Location. YTA sub-unit 3 is located in the north central portion of YTA and borders the northern and northwestern part of Stuart Creek Impact Area. YTA sub-unit 3 has the same boundaries as Yukon Training Area 3.

Description. YTA sub-unit 3 is 27,628 acres. There are 1,729 acres of wetlands in sub-unit 3. Two-thirds of the training area has steep (>35%) slopes, leading to low, wet areas around Harris Creek and Globe Creek. The area is bisected by Beaver Creek Road. YTA sub-unit 3 includes 11,804.62 acres of buffer zone around Stuart Creek Impact Area. Facilities include seven firing points and two landing zones.

Public Access. Public access is allowed for recreation, subject to safety restrictions and military se-

curity when access does not impair the military mission, as determined by the installation commander.

Compatible Uses. YTA sub-unit 3 is suitable for indirect fire weapons, aerial gunnery, small arms, platoon to brigade-sized exercises, company-sized live-fire exercises, road marches, and bivouacs. The training area also is used for large-scale exercises, year-round bivouac, land navigation, and maneuver using SUSVs. The recommended time for military activities involving mechanized vehicles in valley areas is between freeze-up and spring break-up. Other military activities can be conducted year-round. There are no areas off-limits to training in YTA sub-unit 3.

Other compatible uses include natural resources management, habitat improvement, hunting, fishing, trapping, birdwatching, hiking, skiing, dog sledging, and ORV use. Activities that are not compatible with the YTA sub-unit 3 include digging in wetlands without a permit from the Corps of Engineers and any permanent, non-military structures, easements, or leases.

Ecosystem Management Priorities.

1. Conduct LCTA monitoring.
2. Complete survey for threatened and endangered species.
3. Survey for nesting raptors.
4. Survey neotropical migratory birds.
5. Survey small mammals.
6. Conduct archaeological survey.
7. Conduct soil survey.
8. Inventory the forest ecosystem.
9. Conduct Section 404 consultation.
10. Monitor fish and wildlife.
11. Prevent and suppress undesirable wildfires.
12. Manage wildlife habitat.
13. Manage wildlife populations.
14. Control erosion.
15. Implement LRAM projects.
16. Manage the forest ecosystem.
17. Monitor military impacts.

18. Monitor recreational impacts.
19. Survey forest fuels.
20. Implement hunting, trapping, and fishing awareness programs.
21. Enforce hunting, trapping, and fishing laws and regulations.
22. Enforce trespass.
23. Manage special interest areas.
24. Manage recreational use and impacts.

Management Prescription. USARAK will conduct or complete planning-level soil surveys, forest ecosystem inventory, forest fuels inventory, threatened and endangered species surveys, nesting raptor surveys, neotropical migratory bird surveys, small mammal surveys, a baseline water quality survey, and archaeological surveys. USARAK will monitor moose, bears, fish, small game, neotropical migratory birds, furbearers, wolves, and the Fortymile caribou herd if the herd comes onto Fort Wainwright in significant numbers. USARAK will conduct LCTA, military exercise, trespass cabin, and recreational impact monitoring.

The fire protection level for YTA sub-unit 3 is Modified in the northern section (bounded by Hunts Creek to the west) and Full in the rest of the sub-unit. Granite Tors will be managed as a special interest area. Forest ecosystem management will include timber removal for military mission support, forest disease protection, and timber products for military training. Habitat management will include mechanical methods and prescribed burning to improve moose and ruffed grouse habitat. USARAK will conduct hunting, fishing and trapping management and implement a black bear sustainable harvest study.

USARAK will conduct Section 404 consultation for military exercises and a general five-year permit to allow training in low function wetlands. USARAK will manage wetlands and will repair wetlands damage when necessary as mitigation for the general permit. USARAK will control erosion and implement LRAM projects when projects in YTA sub-unit 3 are identified.

USARAK will conduct natural and cultural resources education and awareness, and hunting, trapping, and fishing awareness programs. USARAK

will also conduct hunting, trapping and fishing enforcement; enforce trespass abatement; and manage recreation, such as ORV use and hunting, trapping, and fishing.

11-4b(4) YTA Sub-unit 4

Location. YTA sub-unit 4 is located in the south central portion of YTA and borders the southern and southwestern part of Stuart Creek Impact Area. YTA sub-unit 4 has the same boundaries as Yukon Training Area 4.

Description. YTA sub-unit 4 is 30,451 acres, consisting primarily of steep slopes (>35%) leading to low, wet areas. There are 2,025 acres of wetlands in YTA sub-unit 4. Access to the MOUT site is via Brigadier Road. Facilities include the MOUT site, Bravo and Charlie NIKE sites (not available for training), and the C-130 Firebird Assault Air Strip.

Public Access. Public access is allowed for recreation, subject to safety restrictions and military security when access does not impair the military mission, as determined by the installation commander. Bravo Battery (NIKE) and Charlie Battery (NIKE) are off-limits to the public.

Compatible Uses. YTA sub-unit 4 is suitable for indirect fire weapons, aerial gunnery, small arms, platoon to brigade-sized exercises, company-sized live-fire exercises, road marches, and bivouacs. The training area is also used for large-scale exercises, year-round bivouac, land navigation, and maneuver using SUSVs. The recommended time for military activities involving mechanized vehicles in valley areas is between freeze-up and spring break-up. Other military activities can be conducted year-round. There are no areas off-limits to training in YTA sub-unit 4.

Other compatible uses include natural resources management, habitat improvement, hunting, fishing, trapping, birdwatching, hiking, skiing, dog sledging, and ORV use. Activities that are not compatible with the YTA sub-unit 4 include digging in wetlands without a permit from the Corps of Engineers; ORV use on Bravo Battery, Charlie Battery, or Firebird Assault Airstrip; and any permanent, non-military structures, easements, or leases.

Ecosystem Management Priorities.

1. Conduct LCTA monitoring.
2. Implement LRAM projects.
3. Complete survey for threatened and endangered species.
4. Survey for nesting raptors.
5. Survey neotropical migratory birds.
6. Survey small mammals.
7. Conduct archaeological survey.
8. Prevent and suppress undesirable wildfires.
9. Conduct soil survey.
10. Monitor military impacts.
11. Conduct Section 404 consultation.
12. Implement hunting, trapping, and fishing awareness programs.
13. Enforce hunting, trapping, and fishing laws and regulations.
14. Enforce trespass abatement.
15. Inventory the forest ecosystem.
16. Survey forest fuels.
17. Conduct baseline water quality survey.
18. Monitor fish and wildlife.
19. Manage the forest ecosystem.
20. Manage wildlife habitat.
21. Control erosion.
22. Monitor recreational impacts.
23. Conduct prescribed burning.

Management Prescription. USARAK will conduct or complete planning-level soil surveys, forest ecosystem inventory, forest fuels inventory, threatened and endangered species surveys, nesting raptor surveys, neotropical migratory bird surveys, small mammal surveys, baseline water quality surveys, and archaeological surveys. USARAK will monitor moose, bears, fish, small game, neotropical migratory birds, furbearers, wolves, and the Fortymile caribou herd if the herd comes onto Fort Wainwright in significant numbers. USARAK will also conduct LCTA monitoring and monitor military exercises, trespass structures, and recreation impacts.

The fire protection level for YTA sub-unit 4 is split with Modified fire protection east of Johnson Road and Full protection west of Johnson Road. Forest ecosystem management will include timber removal for military mission support, forest disease protection, timber management, and timber products for military training. Habitat management will include mechanical methods and prescribed burning to improve moose and ruffed grouse habitat. USARAK will manage hunting, fishing, and trapping and implement a black bear sustainable harvest study.

USARAK will conduct Section 404 consultation for military exercises and a general five-year permit to allow training in low function wetlands. USARAK will manage wetlands and will repair wetlands damage if necessary as mitigation for the general permit. USARAK will control erosion and implement LRAM as projects in YTA sub-unit 4 are identified. LRAM projects include fixing the access road and revegetating the MOUT-MAC site and revegetating the area around the Firebird Assault Airstrip.

USARAK will conduct natural and cultural resources education and awareness, and hunting, trapping, and fishing awareness programs. USARAK will also conduct hunting, trapping and fishing enforcement; enforce trespass abatement; and manage recreation, such as ORV use and hunting, trapping, and fishing.

11-4b(5) YTA Sub-unit 5

Location. YTA sub-unit 5 is located in the central portion of YTA and borders on the southern portion of the Stuart Creek Impact Area.

Description. YTA sub-unit 5 is 10,197 acres. There are 241 acres of wetlands in YTA sub-unit 5. The sub-unit has steep (>35%) slopes, leading to low, wet areas around Stuart Creek and the South Fork Chena River. This area is bordered on the south by Brigadier Road. YTA sub-unit 5 includes 8,698.09 acres of buffer zone around Stuart Creek Impact Area. Facilities include two firing points and three landing zones.

Public Access. Public access is allowed for recreation, subject to safety restrictions and military security when access does not impair the military mission, as determined by the installation commander.

Compatible Uses. YTA sub-unit 5 is suitable for indirect fire weapons, aerial gunnery, small arms, platoon to brigade-sized exercises, company-sized live-fire exercises, road marches, and bivouacs. It is also used for large-scale exercises, year-round bivouac, land navigation, and maneuver using SUSVs. The recommended time for military activities involving mechanized vehicles in valley areas is between freeze-up and spring break-up. Other military activities can be conducted year-round. There are no areas off-limits to training in YTA sub-unit 5.

Other compatible uses include natural resources management, habitat improvement, hunting, fishing, trapping, birdwatching, hiking, skiing, dog sledding, and ORV use. Activities that are not compatible with the YTA sub-unit 5 include digging in wetlands without a permit from the Corps of Engineers and any permanent, non-military structures, easements, or leases.

Ecosystem Management Priorities.

1. Conduct LCTA monitoring.
2. Complete survey for threatened and endangered species.
3. Survey for nesting raptors.
4. Survey neotropical migratory birds.
5. Survey small mammals.
6. Conduct archaeological survey.
7. Conduct soil survey.
8. Inventory the forest ecosystem.
9. Conduct Section 404 consultation.
10. Monitor fish and wildlife.
11. Manage wildlife habitat.
12. Manage wildlife populations.
13. Control erosion.
14. Conduct LRAM projects.
15. Manage the forest ecosystem.
16. Prevent and suppress undesirable wildfires.
17. Monitor military impacts.
18. Monitor recreational impacts.
19. Survey forest fuels.
20. Implement hunting, trapping, and fishing awareness programs.

21. Enforce hunting, trapping, and fishing laws and regulations.
22. Enforce trespass abatement.
23. Manage special interest areas.
24. Manage recreational use and impacts.

Management Prescription. USARAK will conduct or complete planning-level soil surveys, forest ecosystem inventory, forest fuels inventory, threatened and endangered species surveys, nesting raptor surveys, neotropical migratory bird surveys, small mammals surveys, baseline water quality surveys, and archaeological surveys. USARAK will monitor moose, bears, fish, small game, neotropical migratory birds, furbearers, wolves and the Fortymile caribou herd if the herd comes onto Fort Wainwright in significant numbers. USARAK will also conduct LCTA monitoring and monitor military exercises, trespass structures, and recreation impacts.

The fire protection level for YTA sub-unit 5 is split with the western portion under Modified fire protection and the eastern portion, Limited. Granite Tors will be managed as a special interest area. Forest ecosystem management will include timber removal for military mission support, forest disease protection, and timber products for military training. Habitat management will include mechanical methods and prescribed burning to improve moose and ruffed grouse habitat. USARAK will manage hunting, fishing and trapping and implement a black bear sustainable harvest study.

USARAK will conduct Section 404 consultation for military exercises and a general five-year permit to allow training in low function wetlands. USARAK will also manage wetlands and will repair wetlands damage if necessary as mitigation for the general permit. USARAK will control erosion and implement LRAM projects when projects in YTA sub-unit 5 are identified. USARAK will conduct natural and cultural resources education and awareness and hunting, trapping, and fishing awareness programs. USARAK will also conduct hunting, trapping, and fishing enforcement; enforce trespass; and manage recreation, such as ORV use and hunting, trapping, and fishing.

11-4b(6) YTA Sub-unit 6

Location. YTA sub-unit 6 is located in the north-eastern portion of YTA and borders on the eastern part of the Stuart Creek Impact Area. YTA sub-unit 6 has the same boundaries as Yukon Training Area 6.

Description. YTA sub-unit 6 is 39,369 acres. There are 4,423 acres of wetlands in sub-unit 6. The training area has steep (>35%) slopes, leading to low, wet areas around Beaver Creek and the South Fork Chena River. Sub-unit 6 includes 9,976.87 acres of buffer zone around Stuart Creek Impact Area. Facilities include two firing points and Air Force threat emitter sites.

Public Access. Public access is allowed for recreation, subject to safety restrictions and military security when access does not impair the military mission, as determined by the installation commander.

Compatible Uses. YTA sub-unit 6 is suitable for indirect fire weapons, aerial gunnery, small arms, platoon to brigade-sized exercises, company-sized live-fire exercises, road marches, and bivouacs. The training area is also used for large-scale exercises, year-round bivouac, land navigation, and maneuver using SUSVs. The recommended time for military activities involving mechanized vehicles in valley areas is between freeze-up and spring break-up. Other military activities can be conducted year-round.

There are two Prohibited Tactical Training Areas off-limits to maneuver training in YTA sub-unit 6. The Beaver Creek PTTA borders YTA sub-unit 6 on the north and consists of 11,191.48 acres. The Pine Creek Mining Claim PTTA is located at WG324795 to WG329783 and is 92.22 acres.

Other compatible uses include natural resources management, habitat improvement, hunting, fishing, trapping, birdwatching, hiking, skiing, dog sledging, and ORV use. Activities that are not compatible with the YTA sub-unit 6 include digging in wetlands without a permit from the Corps of Engineers and any permanent, non-military structures, easements, or leases.

Ecosystem Management Priorities.

1. Conduct LCTA monitoring.

2. Complete survey for threatened and endangered species.
3. Survey for nesting raptors.
4. Survey neotropical migratory birds.
5. Survey small mammals.
6. Conduct archaeological survey.
7. Conduct soil survey.
8. Inventory the forest ecosystem.
9. Conduct Section 404 consultation.
10. Monitor fish and wildlife.
11. Manage wildlife habitat.
12. Manage wildlife populations.
13. Control erosion.
14. Implement LRAM projects.
15. Manage the forest ecosystem.
16. Monitor military impacts.
17. Monitor recreational impacts.
18. Survey forest fuels.
19. Implement hunting, trapping, and fishing awareness programs.
20. Enforce hunting, trapping, and fishing laws and regulations.
21. Enforce trespass abatement.
22. Manage special interest areas.
23. Manage recreational use and impacts.

Management Prescription. USARAK will conduct or complete planning-level soil surveys, forest ecosystem inventory, forest fuels inventory, threatened and endangered species surveys, nesting raptor surveys, neotropical migratory bird surveys, small mammal surveys, baseline water quality surveys, and archaeological surveys. USARAK will monitor moose, bears, fish, small game, neotropical migratory birds, furbearers, wolves, and the Fortymile caribou herd if the herd comes onto Fort Wainwright in significant numbers. USARAK will also conduct LCTA monitoring and monitor military exercises, trespass structures, and recreation impacts.

The fire protection level for YTA Sub-unit 6 is Limited fire protection. Granite Tors will be managed as a special interest area. Forest ecosystem man-

agement will include timber removal for military mission support, forest disease protection, and timber products for military training. Habitat management will include mechanical methods and prescribed burning to improve moose and ruffed grouse habitat. USARAK will manage hunting, fishing and trapping and implement a black bear sustainable harvest study.

USARAK will conduct Section 404 consultation for military exercises and a general five-year permit to allow training in low function wetlands. USARAK will manage wetlands and will repair wetlands damage if necessary as mitigation for the general permit. USARAK will control erosion and implement LRAM projects when projects in YTA sub-unit 6 are identified.

USARAK will conduct natural and cultural resources education and awareness, and hunting, trapping, and fishing awareness programs. USARAK will also conduct hunting, trapping and fishing enforcement; enforce trespass abatement; and manage recreation, such as ORV use and hunting, trapping, and fishing.

11-4b(7) YTA Sub-unit 7

Location. YTA sub-unit 7 is located in the southeastern portion of YTA and borders the southeastern portion of the Stuart Creek Impact Area. YTA sub-unit 7 has the same borders as Yukon Training Area 7.

Description. YTA sub-unit 7 has 43,424 acres. There are 3,994 acres of wetlands in YTA sub-unit 7. The sub-unit has steep (>35%) slopes, leading to low, wet areas near Ninety-eight Mile Creek. YTA sub-unit 7 includes 2,292.32 acres of buffer zone around Stuart Creek Impact Area.

Public Access. Public access is allowed for recreation, subject to safety restrictions and military security, at such times when access does not impair the military mission, as determined by the installation commander.

Compatible Uses. YTA sub-unit 7 is suitable for indirect fire weapons, aerial gunnery, small arms, platoon to brigade-sized exercises, company-sized live-fire exercises, road marches, and bivouac. The training area is also used for large-scale exercises, year-

round bivouac, land navigation, and maneuver using SUSVs. The recommended time for military activities involving mechanized vehicles in valley areas is between freeze-up and spring break-up. Other military activities can be conducted year-round. There are no areas off-limits to training in YTA sub-unit 7.

Other compatible uses include natural resources management, habitat improvement, hunting, fishing, trapping, birdwatching, hiking, skiing, dog sledding, and ORV use. Activities that are not compatible with the YTA sub-unit 7 include digging in wetlands without a permit from the Corps of Engineers and any permanent, non-military structures, easements, or leases.

Ecosystem Management Priorities.

1. Conduct LCTA monitoring.
2. Complete survey for threatened and endangered species.
3. Survey for nesting raptors.
4. Survey neotropical migratory birds.
5. Survey small mammals.
6. Conduct archaeological survey.
7. Conduct soil survey.
8. Inventory the forest ecosystem.
9. Conduct Section 404 consultation.
10. Monitor fish and wildlife.
11. Manage wildlife habitat.
12. Manage wildlife populations.
13. Control erosion.
14. Implement LRAM projects.
15. Manage forest ecosystem.
16. Monitor military impacts.
17. Monitor recreational impacts.
18. Survey forest fuels.
19. Implement hunting, trapping, and fishing awareness programs.
20. Enforce hunting, trapping, and fishing laws and regulations.
21. Enforce trespass abatement.

22. Manage special interest areas.
23. Manage recreational use and impacts.

Management Prescription. USARAK will conduct or complete planning-level soil surveys, forest ecosystem inventory, forest fuels inventory, threatened and endangered species surveys, nesting raptor surveys, neotropical migratory bird surveys, small mammal surveys, baseline water quality surveys, and archaeological surveys. USARAK will monitor moose, bears, fish, small game, neotropical migratory birds, furbearers, wolves, and the Fortymile caribou herd if the herd comes onto Fort Wainwright in significant numbers. USARAK will conduct LCTA monitoring and monitor military exercises, trespass structures, and recreation impacts.

The fire protection level for YTA sub-unit 7 is Limited fire protection. Granite Tors will be managed as a special interest area. Forest ecosystem management will include timber removal for military mission support, forest disease protection, and timber products for military training. Habitat management will include mechanical methods and prescribed burning to improve moose and ruffed grouse habitat. USARAK will manage hunting, fishing, and trapping and implement a black bear sustainable harvest study.

USARAK will conduct Section 404 consultation for military exercises and a general five-year permit to allow training in low function wetlands. USARAK will manage wetlands and repair wetlands damage if necessary as mitigation for the general permit. USARAK will control erosion and implement LRAM projects when projects in YTA sub-unit 7 are identified.

USARAK will conduct natural and cultural resources education and awareness, and hunting, trapping, and fishing awareness programs. USARAK will also conduct hunting, trapping, and fishing enforcement; enforce trespass abatement; and manage recreation, such as ORV use and hunting, trapping, and fishing.

11-4b(8) YTA Sub-unit 8 (Stuart Creek Impact Area)

Location. YTA sub-unit 8 (Stuart Creek Impact Area) is located in the center of the YTA.

Description. The YTA sub-unit 8 has 25,240 acres of steep, hilly, heavily wooded terrain with low, wet areas around Stuart Creek. The impact area is used for aerial gunnery, surface-to-air, and direct and indirect firing. It is the ground and associated airspace within the training complex used to contain fired or launched ammunition and explosives and resulting fragments, debris, and components from various weapon systems. Along the road network near the impact area, there are many firing points for indirect fire weapons and three hasty airstrips. The Train-Fire Range is in the western portion of the area. The Stuart Creek Impact Area is within restricted airspace (R2205).

Access. Access into YTA sub-unit 8 is prohibited. Military personnel may request permission to enter the sub-unit, and if granted, they must be accompanied by EOD personnel. There is no public access allowed into the Stuart Creek Impact Area because of the risk of unexploded ordnance. Stuart Creek Impact Area has been designated as a restricted firing area by the Federal Aviation Administration and is closed to all aircraft up to an altitude of 20,000 feet above mean sea level during periods of scheduled military activity.

Compatible Uses. The YTA sub-unit 8 is suitable for indirect fire weapon training and aerial gunnery exercises. The area is impacted by small arms and dud-producing munitions. The Air Force also uses Stuart Creek Impact Area for bombing. YTA sub-unit 8 has been classified as a high hazard impact area. Other compatible uses include remote monitoring of natural resources and military impacts, and prescribed burning to reduce fire hazards and improve habitat.

Maneuver training, travel, and other training in YTA sub-unit 8 is prohibited. There is the hazard of unexploded ordnance in this area. Commanders will ensure that safety personnel maintain surveillance of the area and have the officer-in-charge suspend firing immediately at the approach of an aircraft. Other activities that are not compatible with YTA sub-unit 8 include any on-the-ground natural resources management, digging in wetlands without a permit from the Corps of Engineers, hunting, fishing, trapping, bird watching, ORVs of any kind, dog

sledding, airboats, camping, new construction, easements, and leases.

Ecosystem Management Priorities.

1. Complete survey for threatened and endangered species.
2. Conduct baseline water quality survey.
3. Conduct archaeological survey.
4. Conduct soil survey.
5. Monitor military impacts.
6. Conduct prescribed burning.
7. Enforce hunting, trapping, and fishing laws and regulations.
8. Enforce trespass abatement.
9. Inventory the forest ecosystem.
10. Implement natural and cultural resource education and awareness programs.

Management Prescription. USARAK will conduct or complete planning-level soil surveys, forest ecosystem inventory, threatened and endangered species surveys, baseline water quality surveys, and archaeological surveys. USARAK will monitor fish and wildlife monitoring using harvest data. USARAK will monitor military exercises and trespass structures. Due to the prohibition on entry into the impact area, the soil survey and forest ecosystem inventory will be accomplished by extrapolation of data from other areas and remote imagery. The archeological survey will be accomplished using modeling and site prediction. Waters entering and leaving the Stuart Creek Impact Area will be tested through water quality surveys. Other projects requiring monitoring will be implemented by means of aerial surveys and videography.

The fire suppression level is Limited protection. Fire suppression crews will not enter impact areas on the ground. A prescribed burn in Stuart Creek Impact Area will take place to reduce fuel loads and increase the number of days the impact area is available for training. USARAK will conduct natural and cultural resource education and awareness programs; hunting, trapping, and fishing enforcement; and enforce trespass.

11-4b(9) YTA Sub-unit 9 (AFTAC)

Location. The YTA sub-unit 9 (Air Force Technical Applications Center [AFTAC]) is located in the north central portion of YTA, east of Transmitter Road.

Description. YTA sub-unit 9 has 23,277 acres. It contains 17,910 acres of wetland. Two-thirds of the training area has steep (>35%) slopes. The area is bisected by Beaver Creek Road. It is drained by Horner Creek into the Chena River. The AFTAC is utilized by the Air Force under an Army land use permit. The area contains ground sensors and is used to detect seismic disturbances. The Army has joint use of 19,272 acres and the Air Force has exclusive rights to the remaining 2,995 acres.

Public Access. Public access is prohibited into YTA sub-unit 9 because ground disturbance can disrupt seismic detector instruments. The public is allowed to drive on the western boundary on Transmitter Road and through the site on Beaver Creek Road. No off-road access is allowed. The Army continues to have unlimited access to Beaver Creek Road until such time as the Air Force provides an alternate, all-weather, gravel, two-way road acceptable to the Army. Hunting is not allowed within the sub-unit.

Compatible Uses. YTA sub-unit 9 is suitable for administrative travel along Beaver Creek Road, foot and light vehicle maneuvers, small unit exercises, and bivouacs. Other compatible uses include passive natural resource management activities, such as remote monitoring of natural resources.

The Army is restricted from subterranean explosions and ordnance explosions (except small arms) and from heavy, tracked vehicle maneuvering within the area. Other activities that are not compatible with YTA sub-unit 9 include any on-the-ground natural resources management, digging in wetlands without a permit from the Corps of Engineers, hunting, fishing, trapping, bird watching, ORVs of any kind, dog sledding, camping, new construction, easements, or leases.

Ecosystem Management Priorities.

1. Complete survey for threatened and endangered species.

2. Survey for nesting raptors.
3. Survey neotropical migratory birds.
4. Survey small mammals.
5. Prevent and suppress undesirable wildfires.
6. Conduct baseline water quality survey.
7. Conduct archaeological survey.
8. Conduct soil survey.
9. Inventory the forest ecosystem.
10. Survey forest fuels.
11. Conduct Section 404 consultation.
12. Monitor fish and wildlife.
13. Conduct LCTA monitoring.
14. Monitor trespass cabin status.
15. Monitor recreational impacts.
16. Implement natural and cultural resource education and awareness programs.
17. Enforce hunting, trapping, and fishing laws and regulations.
18. Enforce trespass abatement.

Management Prescription. USARAK will conduct or complete planning-level soil surveys, forest ecosystem inventory, forest fuels inventory, threatened and endangered species surveys, nesting raptor surveys, neotropical migratory bird surveys, small mammal surveys, baseline water quality surveys, and archaeological surveys. USARAK will monitor moose, bears, fish, small game, neotropical migratory birds, furbearers, wolves, and the Fortymile caribou herd if the herd comes onto Fort Wainwright in significant numbers. USARAK will also conduct LCTA monitoring and monitor military exercises, trespass structures, and recreation impacts.

The fire protection level for AFTAC is Full fire protection. USARAK will conduct Section 404 consultation for a general five-year permit to allow training in low function wetlands. USARAK will manage wetlands and repair wetlands damage if necessary as mitigation for the general permit. USARAK will conduct natural and cultural resources education and awareness programs; conduct hunting, trapping, and fishing enforcement; and enforce trespass abatement.

11-4c Tanana Flats Ecological Management Unit

Location. The Tanana Flats ecological management unit is located south of the Tanana River from Fort Wainwright. This area contains approximately 630,000 acres of land and is bordered on the north and east by the Tanana River, on the west by the Wood River, and on the south by the 34 grid line.

Description. The terrain is generally muskeg bogs with high ground in the southeast near Blair Lakes. Access during summer is limited to air and boat since no bridges span the Tanana River in this area. In the winter, an ice bridge is often constructed across the river, and the entire area is then trafficable. The Air Force has a bombing/gunnery range west of Blair Lakes that is off-limits. In winter, this unit has several areas used as Drop Zones: Clear Creek, Larry, Ritter, Lynn and the lakes themselves. A hasty airstrip for C130s is located in the southern portion, as well as an airstrip adjacent to Blair Lakes. However, the strips require engineer work before they can be used by large airplanes. Alpha Impact Area is located in the northern portion containing an impact area for indirect fire weapons and small arms firing from north of the Tanana River. Surveyed firing points are located near Range Control.

The Tanana Flats ecological management unit contains portions of the Tanana Floodplain ecodistrict and the Tanana-Wood River Flats ecodistrict. The Tanana Floodplain ecodistrict on Tanana Flats is divided into the Eielson-Tanana Floodplain, Rosie Creek-Tanana Floodplain, Salchaket Slough Floodplain, and Salchaket Slough Lowlands. The Tanana-Wood River Flats ecodistrict on Tanana Flats is composed of Clear Creek Lowlands, Willow Creek Lowlands, Crooked Creek Lowlands, Dry Creek Lowlands, Wood River Lowlands, Little Delta River Lowlands, Tanana-Blair Lake Uplands, and Wood River Uplands eco-subdistricts.

Management Objectives.

- Manage Tanana River, Clear Creek-Blair Lakes, and Wood River-Willow Creek sub-units as Modified Management areas.

- Manage Alpha Impact Area and Blair Lakes Impact Area sub-units as Limited Management areas.

11-4c(1) Wood River- Willow Creek Sub-unit

Location. The Wood River-Willow Creek sub-unit occupies the western half of the Tanana Flats ecological management unit.

Description. The Wood River-Willow Creek sub-unit is composed primarily of the Wood River Lowlands, Willow Creek Lowlands, and Crooked Creek Lowlands ecosubdistricts. They are characterized by abandoned floodplain cover deposits, floating fens, and abandoned river channels. Permafrost is discontinuous, being absent in bogs, fens, and swamps. Common vegetation includes black spruce and birch forests, shrub swamps, and sedge-moss bogs.

The Wood River-Willow Creek sub-unit also has small portions occupied by the Wood River Uplands ecosubdistrict and the Wood River Buttes, which are part of the Blair Lakes Uplands ecosubdistrict. The Wood River Uplands are dominated by well-drained, abandoned riverbed deposits associated with a glacial outwash fan of Riley Creek glaciation. Surface streams are uncommon. Permafrost probably is absent, and thermokarst features are not evident. The vegetation is dominated by white spruce-birch-aspen forests or by herbaceous and shrubby vegetation in burned areas.

Public Access. Public access is allowed for recreation, subject to safety restrictions and military security when access does not impair the military mission, as determined by the installation commander.

Compatible Uses. The Wood River-Willow Creek sub-unit is suitable for platoon, company, battalion and brigade-sized exercises and bivouacs; air-mobile operations; and ski and road marches in winter. This sub-unit is suitable for air-mobile operations and foot training in summer. Willow Island Research Site is off-limits to military maneuver training.

Other compatible uses include natural resources management, habitat improvement, hunting, fishing, trapping, birdwatching, hiking, skiing, and dog sledding. Activities that are not compatible with the Wood River-Willow Creek sub-unit include digging

in wetlands without a permit from the Corps of Engineers; ORVs, including airboats; and any permanent, non-military structures, easements, or leases.

Ecosystem Management Priorities.

1. Update trespass structures inventory.
2. Monitor recreational impacts.
3. Enforce trespass abatement.
4. Remove trespass structures.
5. Manage recreational use and impacts.
6. Monitor fish and wildlife.
7. Conduct Section 404 consultation.
8. Implement hunting, trapping, and fishing awareness programs.
9. Enforce hunting, trapping, and fishing laws and regulations.
10. Complete survey for threatened and endangered species.
11. Survey for nesting raptors.
12. Survey neotropical migratory birds.
13. Survey small mammals.
14. Conduct baseline water quality survey.
15. Conduct archaeological survey.
16. Conduct LCTA monitoring.
17. Monitor military impacts.
18. Manage special interest areas.
19. Conduct soil survey.
20. Inventory the forest ecosystem.
21. Manage wildlife habitat.
22. Manage wildlife populations.
23. Manage the forest ecosystem.
24. Manage wetlands vegetation.
25. Implement natural and cultural resource education and awareness programs.

Management Prescription. USARAK will conduct or complete planning-level soil surveys, forest ecosystem inventory, forest fuels inventory, threatened and endangered species surveys, nesting raptor surveys, neotropical migratory bird surveys, small mammal surveys, baseline water quality surveys,

and archaeological surveys. USARAK will monitor moose, bears, fish, small game, neotropical migratory birds, furbearers, and wolves. USARAK will conduct LCTA monitoring and monitor military exercises, trespass structures, and recreation impacts.

The fire protection level for Wood River-Willow Creek sub-unit is Limited fire protection. Wood River Buttes and moose calving areas will be managed as special interest areas. Forest ecosystem management will include timber removal for military mission support, forest disease protection, and timber products for military training. Habitat management will utilize fire and limited suppression to achieve habitat improvement goals for moose and other wildlife. USARAK will manage hunting, fishing, and trapping management.

USARAK will conduct Section 404 consultation for military exercises and a general five-year permit to allow training in low function wetlands. USARAK will manage wetlands and repair wetlands damage when necessary as mitigation for the general permit. USARAK will control erosion and implement LRAM projects when projects in the Wood River-Willow Creek sub-unit are identified. USARAK will conduct natural and cultural resources education and awareness; hunting, trapping, and fishing awareness programs; conduct hunting, trapping and fishing enforcement; enforce trespass abatement; and manage recreation, such as ORV use and hunting, trapping, and fishing.

11-4c(2) Clear Creek - Blair Lakes Sub-unit

Location. The Clear Creek-Blair Lakes sub-unit is located in the eastern half of Tanana Flats ecological management unit.

Description. The Clear Creek-Blair Lakes sub-unit is primarily composed of Clear Creek Lowlands, Dry Creek Lowlands, and Blair Lakes Uplands. Lowland areas are characterized by abandoned floodplain cover deposits that have incorporated substantial amounts of lowland loess and organic deposits, as evident by lack of fluvial patterning of the surface. Flat bogs are prevalent, but collapse-scar bogs are uncommon. Permafrost is nearly continuous, and ice-wedge polygons are evident in some places. Vegetation is dominated by shrub birch-ericaceous low scrub, wet willow-sedge fens,

and black spruce and tamarack forests. Uplands are dominated by residual soils on upper slopes, upland retransported deposits on mid-slopes, and lowland retransported deposits on lower slopes. Permafrost is present on northern and lower slopes and absent on southern slopes. Vegetation is dominated by white-spruce-birch-aspen on upper slopes, black spruce and birch forests on lower slopes, and dry Elymus-shrub on steep, south-facing bluffs.

Public Access. Public access is allowed for recreation, subject to safety restrictions and military security when access does not impair the military mission, as determined by the installation commander.

Compatible Uses. The Clear Creek-Blair Lakes sub-unit is suitable for platoon, company, battalion and brigade-sized exercises and bivouacs; air-mobile operations; and ski and road marches in winter. This sub-unit is suitable for air-mobile operations and foot training in summer. Four small Prohibited Tactical Training Areas are off-limits to military maneuver training.

Other compatible uses include natural resources management, habitat improvement, hunting, fishing, trapping, birdwatching, hiking, skiing, and dog sledding. Activities that are not compatible with the Clear Creek-Blair Lakes sub-unit include digging in wetlands without a permit from the Corps of Engineers; ORVs, including airboats; and any permanent, non-military structures, easements, or leases.

Ecosystem Management Priorities.

1. Update trespass structures inventory.
2. Monitor recreational impacts.
3. Enforce trespass abatement.
4. Remove trespass structures.
5. Manage recreational use and impacts.
6. Monitor fish and wildlife.
7. Conduct Section 404 consultation.
8. Implement hunting, trapping, and fishing awareness programs.
9. Enforce hunting, trapping, and fishing laws and regulations.
10. Complete survey for threatened and endangered species.

11. Survey for nesting raptors.
12. Survey neotropical migratory birds.
13. Survey small mammals.
14. Conduct baseline water quality survey.
15. Conduct archaeological survey.
16. Conduct LCTA monitoring.
17. Monitor military impacts.
18. Manage special interest areas.
19. Conduct soil survey.
20. Inventory the forest ecosystem.
21. Manage wildlife habitat.
22. Manage wildlife populations.
23. Manage the forest ecosystem.
24. Manage wetlands vegetation.
25. Implement natural and cultural resource education and awareness programs.

Management Prescription. USARAK will conduct or complete planning-level soil surveys, forest ecosystem inventory, forest fuels inventory, threatened and endangered species surveys, nesting raptor surveys, neotropical migratory bird surveys, small mammal surveys, baseline water quality surveys, fish surveys in Blair Lakes, and archaeological surveys. USARAK will monitor moose, bears, fish, small game, neotropical migratory birds, furbearers, and wolves. USARAK will also conduct LCTA monitoring and monitor military exercises, trespass structures, and recreation impacts.

The fire protection level for Clear Creek-Blair Lakes sub-unit is Limited fire protection. Clear Creek and Blair Lakes Buttes and moose calving areas will be managed as special interest areas. Forest ecosystem management will include timber removal for military mission support, forest disease protection, and timber products for military training. Habitat management will utilize natural fires and a let-burn policy to achieve habitat improvement goals for moose and other wildlife. USARAK will manage hunting, fishing, and trapping.

USARAK will conduct Section 404 consultation for military exercises and a general five-year permit to allow training in low function wetlands. USARAK will manage wetlands and repair wetlands damage when necessary as mitigation for the general per-

mit. USARAK will control erosion and implement LRAM projects when projects in Clear Creek-Blair Lakes sub-unit are identified.

USARAK will conduct natural and cultural resources education and awareness, and hunting, trapping, and fishing awareness programs. USARAK will also conduct hunting, trapping and fishing enforcement; enforce trespass; and manage recreation, such as ORV use and hunting, trapping, and fishing.

11-4c(3) Tanana River Sub-unit

Location. The Tanana River sub-unit is located in an arc around the eastern and northern portions of Tanana Flats.

Description. The Tanana River sub-unit is part of the Tanana Floodplain ecodistrict. Ecosubdistricts that make up the Tanana River sub-unit include the Tanana-Eielson Floodplain, Rosie Creek-Tanana Floodplain, the Salchaket Slough Floodplain, the Salchaket Slough Lowlands, and the Bear Creek Lowlands. Floodplains are characterized by braided floodplain riverbed deposits, anastomizing channels, numerous stable islands, and braided river bars. The Salchaket Slough is a large channel of the Tanana River. Permafrost is absent. Vegetation includes partially vegetated river barrens, riverine willow and alder tall scrub, and balsam poplar and white spruce forests. Forest productivity is high.

Public Access. Public access is allowed for recreation, subject to safety restrictions and military security when access does not impair the military mission, as determined by the installation commander.

Environmental Limitations. No digging or surface disturbance of any kind is allowed in areas designated as wetlands without first obtaining a permit from the Corps of Engineers. Snow removal with mechanical equipment may not dig into soils.

Compatible Uses. The Tanana River sub-unit is suitable for platoon, company, battalion, and brigade-sized exercises and bivouacs; air-mobile operations; and ski and road marches in winter. This sub-unit is suitable for air-mobile operations and foot training in summer. A permit is required to construct an ice bridge over the Tanana River for access during winter.

Other compatible uses include natural resources management, habitat improvement, hunting, fishing, trapping, birdwatching, hiking, skiing, and dog sledding. Activities that are not compatible with the Tanana River sub-unit include digging in wetlands without a permit from the Corps of Engineers; ORVs, including airboats; and any permanent, non-military structures, easements, or leases.

Ecosystem Management Priorities.

1. Update trespass structures inventory.
2. Monitor recreational impacts.
3. Enforce trespass abatement.
4. Remove trespass structures.
5. Manage recreational use and impacts.
6. Monitor fish and wildlife.
7. Conduct Section 404 consultation.
8. Implement hunting, trapping, and fishing awareness programs.
9. Enforce hunting, trapping, and fishing laws and regulations.
10. Complete survey for threatened and endangered species.
11. Survey for nesting raptors.
12. Survey neotropical migratory birds.
13. Survey small mammals.
14. Conduct baseline water quality survey.
15. Conduct archaeological survey.
16. Conduct LCTA monitoring.
17. Monitor military impacts.
18. Manage special interest areas.
19. Conduct soil survey.
20. Inventory the forest ecosystem.
21. Manage wildlife habitat.
22. Manage wildlife populations.
23. Manage the forest ecosystem.
24. Manage wetland vegetation.
25. Implement natural and cultural resource education and awareness programs.

Management Prescription. USARAK will conduct planning-level soil surveys, forest ecosystem inven-

tory, forest fuels inventory, threatened and endangered species surveys, nesting raptor surveys, neotropical migratory bird surveys, small mammal surveys, baseline water quality surveys, and archaeological surveys. USARAK will monitor moose, bears, fish, small game, neotropical migratory birds, furbearers, and wolves. USARAK will conduct LCTA monitoring and monitor military exercises, trespass structures, and recreation impacts.

The fire protection level for Tanana River sub-unit is Limited fire protection. Forest ecosystem management will include timber removal for military mission support, timber management, forest disease protection, and timber products for military training. Habitat management will utilize natural fires and a let-burn policy to achieve habitat improvement goals for moose and other wildlife. USARAK will manage recreational access.

USARAK will conduct Section 404 consultation for military exercises, a general five-year permit to allow training in low function wetlands, and permits for ice bridges over the Tanana River. USARAK will manage wetlands and repair wetlands damage when necessary as mitigation for the general permit. USARAK will control erosion and implement LRAM projects when projects in Tanana River sub-unit are identified.

USARAK will conduct natural and cultural resources education and awareness, and hunting, trapping, and fishing awareness programs. USARAK will also conduct hunting, trapping and fishing enforcement; enforce trespass abatement; and manage recreation, such as ORV use and hunting, trapping, and fishing.

11-4c(4) Alpha Impact Area Sub-unit

Location. Alpha Impact Area sub-unit is located adjoining and directly south of the Fort Wainwright Main Post.

Description. Alpha Impact Area sub-unit contains small arms ranges south of the Richardson Highway, the Small Arms Impact Area, and Alpha Impact Area. The Alpha Impact Area includes two ecodistricts: the Tanana Floodplain ecodistrict and the Tanana-Wood River Flats ecodistrict. This sub-unit is a separate unit because its primary use is military impact area. This area must be managed

differently from other sub-units because access is not allowed for safety reasons. Small arms ranges are located within the Fairbanks Lowlands, and the Small Arms Impact Area crosses the Tanana-Eielson floodplain and extends into the Salchaket Slough Lowlands. The Alpha Impact Area is located within the Salchaket Floodplain and the Clear Creek Lowlands.

Public Access. Access into the Alpha Impact Area sub-unit is prohibited. Military personnel may request permission to enter the sub-unit and if granted, they must be accompanied by EOD personnel. There is no public access allowed in the Alpha Impact Area or impact area buffer because of the risk of unexploded ordnance.

Compatible Uses. The Alpha Impact Area sub-unit is suitable for indirect fire weapon training and aerial gunnery exercises. The area is impacted by small arms and dud-producing munitions and is the ground and associated airspace within Tanana Flats used to contain fired or launched ammunition and explosives and resulting fragments, debris, and components from various weapon systems. Other compatible uses include remote monitoring of natural resources and military impacts and prescribed burning to reduce fire hazards and improve habitat.

Maneuver training, travel, and other military training is prohibited in this unit due to the hazard of unexploded ordnance. Commanders will ensure that safety personnel maintain surveillance of the area and have the officer-in-charge suspend firing immediately at the approach of aircraft. Other activities which are not compatible with the Alpha Impact Area sub-unit include any on-the-ground natural resources management, digging in wetland without a permit from the Corps of Engineers, hunting, fishing, trapping, bird watching, ORVs of any kind, dog sledding, airboats, camping, new construction, easements, or leases.

Ecosystem Management Priorities.

1. Complete survey for threatened and endangered species.
2. Conduct baseline water quality survey.
3. Conduct archaeological survey.
4. Conduct soil survey.

5. Monitor military impacts.
6. Conduct prescribed burning.
7. Enforce hunting, trapping, and fishing laws and regulations.
8. Enforce trespass.
9. Inventory the forest ecosystem.
10. Monitor fish and wildlife
11. Implement natural and cultural resource education and awareness programs.

Management Prescription. USARAK will conduct or complete planning-level soil surveys, forest ecosystem inventory, threatened and endangered species surveys, baseline water quality surveys, and archaeological surveys. USARAK will monitor fish and wildlife monitoring using harvest data and monitor military exercises and trespass structures. Due to the prohibition on entry into this impact area, the soil survey and forest ecosystem inventory will be accomplished by extrapolation of data from other areas and remote imagery. The archeological survey will be accomplished using modeling and site prediction.

The fire suppression level is Limited protection. Fire suppression crews will not enter impact areas on the ground. USARAK will conduct natural and cultural resource education and awareness programs; enforce hunting, trapping, and fishing laws and regulations; and trespass.

11-4c(5) Blair Lakes Impact Area Sub-unit

Location. Blair Lakes Impact Area sub-unit is located in south central Tanana Flats Training Area along the southern border of Fort Wainwright.

Description. The Blair Lakes Impact Area sub-unit is completely contained within the Tanana-Wood River Flats ecodistrict. Blair Lakes Impact Area sub-unit is found mainly in the Wood River Lowlands. This sub-unit also contains portions of Wood River Uplands and Dry Creek Lowlands. The Blair Lakes Impact Area is the responsibility of the Air Force.

Public Access. Access into the Blair Lakes Impact Area sub-unit is prohibited. Military personnel may request permission to enter the sub-unit, and if per-

mission is granted, personnel must be accompanied by EOD personnel. There is no public access allowed into the Blair Lakes Impact Area or impact area buffer because of the risk of unexploded ordnance.

Compatible Uses. The Blair Lakes Impact Area is suitable for indirect fire weapon training, aerial gunnery exercises, and is impacted by small arms and dud-producing munitions. It is the ground and associated airspace within the training complex used to contain fired or launched ammunition and explosives and resulting fragments, debris, and components from various weapon systems. The Air Force also uses Blair Lakes Impact Area for bombing. Other compatible uses include remote monitoring of natural resources and military impacts and prescribed burning to reduce fire hazards and improve habitat.

Maneuver training, travel, and other training in the Blair Lakes Impact Area sub-unit is prohibited due to the hazard of unexploded ordnance and is not compatible with this sub-unit. There is the hazard of unexploded ordnance in this area. Commanders will ensure that safety personnel maintain surveillance of the area and have the officer-in-charge suspend firing immediately at the approach of an aircraft. Other activities which are not compatible with Blair Lakes Impact Area sub-unit include any on-the-ground natural resources management, digging in wetlands without a permit from the Corps of Engineers, hunting, fishing, trapping, bird watching, ORVs of any kind, dog sledding, airboats, camping, new construction, easements, or leases.

Ecosystem Management Priorities.

1. Complete survey for threatened and endangered species.
2. Conduct baseline water quality survey.

3. Conduct archaeological survey.
4. Conduct soil survey.
5. Monitor military impacts.
6. Conduct prescribed burning.
7. Enforce hunting, trapping, and fishing laws and regulations.
8. Enforce trespass.
9. Inventory the forest ecosystem.
10. Monitor fish and wildlife.
11. Implement natural and cultural resource education and awareness programs.

Management Prescription. USARAK will conduct or complete planning-level soil surveys, forest ecosystem inventory, threatened and endangered species surveys, baseline water quality surveys, and archaeological surveys. USARAK will monitor fish and wildlife using harvest data. USARAK will monitor military exercises and trespass structures. Due to the prohibition on entry into this impact area, the soil survey and forest ecosystem inventory will be accomplished by extrapolation of data from other areas and remote imagery. The archeological survey will be accomplished using modelling and site prediction.

The fire suppression level is Limited protection. Fire suppression crews will not enter impact areas on the ground. USARAK will conduct natural and cultural resource education and awareness programs; conduct hunting, trapping, and fishing enforcement; and enforce trespass.